

ABSTRACT OF THE DISCLOSURE

An optical system has a broadband source and a chirped Bragg grating etalon. In operation, the broadband source provides a broadband optical signal. The chirped Bragg grating etalon responds to the broadband optical signal, for providing a chirped Bragg grating etalon optical signal having a precise set of the optical reference signals. The chirped Bragg grating etalon may include a pair of chirped Bragg gratings. The precise set of the optical reference signals is determined by the spacing of the chirped Bragg gratings of the chirped Bragg grating etalon. The precise set of the optical reference signals includes a series of peaks covering most of a source spectral width of the broad optical source signal with the power at the beginning and end of the spectrum passed unaffected by the chirped Bragg grating etalon due to the limited bandwidth thereof.